

THE COMMUNITY COLLEGE OF DOUGLAS COUNTY

UMPQUA COLLEGE

ACADEMIC CALENDAR

1964-1965

Fall Term, 1964
Registration . September 21-25 Classes begin . September 28 Late fee charges begin . September 28 Last day to register . October 5 Last day to change courses . October 19 Last day to withdraw from a course . October 23 Veterans Day . November 11 Thanksgiving Vacation . November 26 Final Examinations . December 14-18 Registration for Winter Term for returning students . December 14-18 End of Fall Term Classes . Dec. 19 - Jan. 3
Winter Term, 1965
Registration for new students . January 4 Classes begin . January 4 Late fee charges begin . January 4 Last day to register . January 11 Last day to change courses . January 18 Last day to withdraw from a course . January 22 Final Examinations . March 16-19 Registration for Spring Term . March 16-19 End of Winter Term . March 19 Spring Vacation . March 22-26
Spring Term, 1965
Registration for new students March 29 Classes begin March 29 Late fee charges begin March 29 Last day to register April Last day to change courses April 1 Last day to withdraw from a course April 1 Final examinations June 8 - 1 End of Spring Term June 1

UMPQUA COLLEGE

The Community College of Douglas County

COLLEGE BULLETIN

1964-1965

Roseburg, Oregon

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ORGANIZATION AND FACILITIES

The Area Education District of Douglas County was voted on and approved on March 30, 1964. The Board of Education consisting of seven members was selected at the same time and the new district was named Umpqua College, the Community College of Douglas County.

The Board of Education has rented Roseburg Senior High School facilities for all of its classes. These classes will be held after regular high school hours. Some classes will start in the early afternoon, 3:45, and others will be held as late as 11:00 P.M.

The Board has also leased an administrative office which is located at 852 S. E. Stephens Street, Roseburg. The Mailing address for the College is P. O. Box 699.

Umpqua College will offer a comprehensive program of Liberal Arts, Vocational-Technical, and General Adult education classes. Umpqua College will serve all the people of Douglas County with the exception of those living west of Elkton to the coast.

ADMISSIONS

Umpqua College accepts students of good moral character who provide evidence of suitable preparation for work at the college level. Graduation from an accredited high school provides eligibility. A mature person may establish eligibility by submitting evidence of appropriate work experience or other types of training gained beyond the high school years.

PROCEDURE FOR ADMISSION

Students to be admitted to Umpqua College must accomplish the following:

- File an Application for Admission with the Registrar at least two weeks prior to the registration period.
- 2. Submit a record of the student's previous education to the Registrar. An applicant should contact the high school or college where the work was completed and request that an official transcript be sent to the Registrar, P. O. Box 699, Roseburg, Oregon.
- 3. File the results of a physical examination if the applicant plans to take a course in Physical Education during the year. The examination forms may be secured from the Registrar's Office.
- NOTE: The foregoing requirements need not be met by those adults following a course offered by the General Extension Division or those adults taking General Adult Education courses as described later in this bulletin.

ADMISSION TO FRESHMAN STANDING

Students who have been graduated from an accredited high school, passed a GED test for high school equivalency, or who are 21 years of age and are serious about their educational future, will be placed in Freshman status in the Liberal Arts and Science (college transfer) division.

TRANSFER STUDENTS

Umpqua College accepts students who transfer from other institutions of higher learning and from the Division of Continuing Education. Applicants must present complete transcripts of all previously attended collegiate institutions in addition to complying with the general requirements of this institution. If the student's high school record is adequately reflected on his college transcripts, it is not necessary for him to obtain another.

No transfer credit is granted at entrance for the work done in non-accredited collegiate institutions. However such transfer credit may be obtained, upon petition to the Registrar, after the student has demonstrated his ability to do satisfactory work at this College. Such a petition must be based on college-level courses.

ADMISSION OF SPECIAL STUDENTS

Persons qualified by maturity and ability to do satisfactory college work but who fail in some respect to meet the requirements for regular standing may apply for admission as a special student until such entrance deficiencies are removed.

Persons enrolled on a non-credit or non-program basis, or persons enrolled on a credit basis of seven hours or less, shall also be classified as special students. Students in this category of special students may be admitted without application and without presenting a high school transcript or transcript of previous college work.

Students may not continue for more than 45 term hours in the special student classification without permission. A special student may not become a candidate for a degree without first qualifying as a regular student.

ADMISSION TO APPRENTICESHIP TRAINING

A student who is interested in this type of training must be cleared first by the appropriate Apprenticeship or Trade Advisory Committee before admission can be granted by this College. The applicant should contact the Director of Vocational-Technical Education before proceeding further with his application.

DEFINITIONS

The academic year of the college is divided into three terms of approximately 12 weeks each. Students may enter at the beginning of any term but they are advised to enter in the fall because of sequence courses. It is especially important that first-year or Freshman students be present for the opening week.

A term hour represents three hours of the student's time each week for one term. This time may be assigned to work in the classroom or laboratory or to outside preparation. The number of lectures, recitations, laboratory, or other periods per week for any course may be found in the course descriptions in this bulletin or the regular Schedule of Classes. The normal amount of scheduled time for a non-laboratory academic class is fifty minutes per week for each term hour of credit. For every hour in class, at least two hours should be devoted to preparation.

A subject is a designated field of knowledge such as History, English, etc.

A course is a subject or an instructional subdivision of a subject offered through a single term.

A year sequence consists of three closely articulated courses in a subject extending through the three terms of the academic year.

A *curriculum* is an organized program of study arranged to provide definite cultural or professional preparation.

A period is a class meeting for discussion, lecture, laboratory, etc., and may be for 50 or more minutes each.

A full-time student is one registered for 15 hours or more term hours of credit.

A special student is one registered for fewer than 7 term hours of credit.

A Freshman is a regular first-year student.

A Sophomore is a regular second-year student who has completed 48 term hours in an academic program or technical program.

A resident is a student whose permanent address is within the Douglas County Area Education District. Moving to the Community College district area does not constitute residence unless the move is a permanent change of address.

REGISTRATION

All students should register in person and should complete registration well before the opening day of each term. Registration dates for the three regular academic terms are listed in the college calendar appearing in the front of this catalog.

Students who have met the admission requirements on time may expect to receive from the Registrar, information on registration well in advance of the announced registration period. If a student does not complete the pre-registration procedure prior to the registration week, there may be some delay in gaining admission to classes. Students are urged to make application just as soon as possible in order to avoid delay.

Student's are completely registered and entitled to attend classes for credit only when they have completed the prescribed procedures including the payment of tuition and fees.

A student may enter Umpqua College at the beginning of any term, but it is advisable for a student to enter the fall term because of course sequence requirements.

CREDIT HOUR LOAD

In order to obtain 93 term hours within the normal 6 terms, a full-time student should enroll for an average of 16 hours per term. Employed students should, however, be aware of the fact that 16 term hours involve about 48 hours of scholastic productivity each week in addition to study during the term. Students who must work, therefore, are strongly urged to fit their job schedules into the term hour equation and to plan on a period in excess of 6 terms in which to complete the first two years of college transfer work. For example, a student who is employed 40 hours per week should enroll for no more than 10 total hours per term and take 9 terms to complete the two years work. No more than 19 hours may be taken in any one term. This regulation may be waived upon petition to the College Administration. Students are reminded that 93 term hours is the maximum that may be transferred to an institution of higher learning in Oregon.

COURSE CHANGES

After the registration period closes any student desiring to make course changes such as to add a course or drop a course must do so by means of a formal request form secured from the Registrar. Students are reminded that there are certain dates

listed in the College Calendar that limits when changes may be made and that there is a \$1.00 fee for changes made after the dates indicated.

WITHDRAWALS

Students may withdraw from a course by filing an official withdrawal form with the Registrar. A student who registers for a course is considered to be in attendance. If a student discontinues without filing the official withdrawal form, he may receive a grade of F in the course. Students who wish to withdraw completely from the College during the term should report to the Registrar. Students are expected to process their withdrawals in person, but under exceptional circumstances may do so by writing a letter of explanation to the Registrar. Proper withdrawal is reflected on the student's transcript and adherence to the correct procedure protects the student's academic record.

GRADING SYSTEM

The quality of students' work is measured by a system of grades and by computed grade-point averages. The grading system consists of four passing grades: A, B, C, and D; failure, F; incomplete, Inc. Students ordinarily receive one of the four passing grades or failure. Exceptional accomplishments are denoted by the grade of A, superior by B, average by C, inferior by D, unsatisfactory by F. When the quality of the work is satisfactory but the course has not been completed for reasons acceptable to the instructor, a record of incomplete, INC. is made and additional time is granted. The Inc. becomes an F unless the work is completed before the close of the next succeeding term. Students are not officially withdrawn (W) from a course until the proper withdrawal forms are filed with the Registrar.

POINTS

Grade points are computed on the basis of 4 points for each term hour of A grade, 3 for each term hour of B grade, 2 for each term hour of C grade, 1 for each term hour of D grade, and 0 for each term hour of F. Marks of Inc. and W are disregarded in the computation of points. The grade-point average, GPA, is the quotient of total points divided by the total term hours in which grades of A. B. C. D. and F are received.

ACADEMIC STANDING

A student's work is considered satisfactory or he is considered in good standing when he maintains an average of "C" (a GPA of 2.00) on both his term and cumulative grade record.

HONOR ROLL

The names of students who carry 12 term hours or more and earn a GPA of 3.50 or above without a failing grade are placed on the term honor roll. An appropriate notation is made on the student's permanent record to indicate the scholastic achievement.

PROBATION

A student who earns a GPA below 2.00 or a student entering with a grade-point average below the 2.00 for a term or cumulative will automatically be placed on probation. Official notice is given and an appropriate notation is made on the permanent record. Continued probationary status may result in the reclassification of the student.

RELEASE FROM PROBATION

A student on probation may achieve good standing by earning both a term and cumulative GPA of 2.00.

SUSPENSION

The College administration has discretionary authority to suspend a student whenever it is apparent that such action is necessary and desirable.

TUITION AND FEES

Fees are payable in full at the time of registration. Payment of the stipulated fees entitles all students registered for academic credit, either full-time or part-time. to all the services maintained by the College for the benefit of the students. These services includes use of the library, use of laboratory and course materials and equipment used in connection with the course for which the student is registered. No reduction in fees is made to students who do not intend to avail themselves of these services.

A resident student is one whose permanent address is within the Douglas County Area Education District. A temporary address change to Roseburg in order to attend Umpqua College classes does not constitute residence.

LOWER DIVISION COLLEGE CLASSES

DIST	CRIC	CT RESIDENT	OUT OF DISTRICT RESIDENT
Per College Credit	\$	13.00	\$ 15.00
3 Credits		39.00	45.00
Full time - 7 or more credits		90.00	105.00

VOCATIONAL-TECHNICAL CLASSES

Full time student, approximately 20 hours per week, would pay per term, \$65.00.

GENERAL ADULT EDUCATION & APPRENTICESHIPS

Per 10 week class session the cost would be \$10.00. For some classes, such as welding, there would be additional charges for instructional supplies of \$10.00. For other classes the fee would be as low as \$2.50 such as for Conversational Spanish.

SPECIAL FEES FOR COLLEGE CREDIT CLASSES

Science deposits per term Refunds will be made at the close of the college year or upon with- drawal.	\$ 5.00
Golf - Student must provide clubs & pay green fees.	
Swimming - per term Bowling - Student must pay his own bowling fee.	3.00

FEE REFUNDS

Students who withdraw from Umpqua College and have complied with regulations governing withdrawals are entitled to certain refunds of tuition and fees, depending on the time of withdrawal. Full tuition less \$1.00 is refunded if withdrawal is made within the first two weeks of the term. One-half tuition less \$1.00 is refunded if withdrawal is made during the third week. One-fourth tuition less \$1.00 is refunded if withdrawal is made during the fourth week. No refund will be made if withdrawal is after the fourth week. All refunds are subject to the following regulations:

- 1. Any claim for refund must be made in writing before the close of the term in which the claim originates.
- 2. Refunds in all cases are calculated from the date of application for refunds and not from the date when the student ceased attending classes. The only exception is in an unusual case where it can be shown that formal withdrawal was delayed for reasons beyond the student's control.

STUDENT BODY ACTIVITIES

At the present time there is no formal organization of a Student Body Association. At such time when an activity is to be undertaken by the students of Umpqua College, in the name of the College, prior approval must be secured from the College Administration. An activity bulletin board will be used to inform Umpqua College students of coming events. This bulletin board is located in the Social Arts Building of Roseburg High School near the College Office.

JOB PLACEMENT

The Administrative Staff frequently receives requests from local employers for parttime workers. If a student is interested in such work during the college year, he should contact either the Registrar or the Director of Vocational-Technical Education.

DEGREES AND AWARDS

Umpqua College will award two degrees at the Commencement in June, 1966 -- Associate of Arts and Associate of Science. Students who complete satisfactorily terminal courses in the Vocational-Technical field or Adult Education will be awarded certificates at the conclusion of the course.

DEGREE REQUIREMENTS

The Associate of Arts and the Associate of Science degrees are nationally recognized awards conferred on students who complete a full two year program of college level courses and who meet the individual requirements of the College making the award.

ASSOCIATE OF ARTS

The general requirements for the Associate of Arts Degree are as follows:

- 1. 93 term hours minimum of transfer credit.
- 2. Cumulative grade point average of 2.00 for all work
- 3. English Composition, 9 term hours.
- 4. Personal Health, HE 250 (unless excused).

- 5. Physical Education, 5 term hours (unless excused).
- 6. A required year sequence in each of the following groups; Science & Mathematics, Social Science, and Humanities. A second year sequence in either Social Science or Humanities.
- 7. At least one of the sequences must be numbered 200 to 210.
- 8. At least one sequence in Humanities must be in the Literature field. Only one sequence in a survey course will apply in fulfilling this requirement.
- 9. The second sequence in either Science & Math or Social Science must be taken in a different department.
- 10. A student must attend Umpqua College at least two terms (including the last term) before the Associate of Arts Degree is awarded, and must have completed 24 term hours at Umpqua College.

ASSOCIATE OF SCIENCE

The general requirements for the Associate of Science Degree are as follows:

- 1. 93 term hours minimun of transfer credit.
- 2. Cumulative grade point average of 2.00 for all work.
- 3. English Composition, 9 term hours.
- 4. Personal Health HE 250 (unless excused).
- 5. Physical Education, 5 term hours (unless excused).
- 5. Required year sequences in each of the following areas: Humanities, Social Science, and Science & Mathematics. A second year sequence in Science & Mathematics.
- 7. Completion of specific departmental requirements prescribed for a particular course of study as can be found in the next section of this catalog including 18 term hours minimum in liberal arts fields.
- 8. At least one of the sequences must be numbered 200 to 210 and the second sequence must be taken in a different department.
- Residence requirements are the same as outlined for the Associate of Arts degree.

COURSE NUMBERING

Liberal Arts and Science courses in this bulletin are numbered in accordance with courses throughout the State of Oregon System of Higher Education as recommended by the Community College Committee. Numbering of terminal courses also conform to the pattern adopted for state use.

- 1 49 Courses which carry no credit toward a degree or terminal courses that may not be used as transfer credit such as Auto Mechanics.
- 50-99 Courses in the first year of foreign language, elementary algebra, and remedial courses.
- 100 110 and 200 210 Survey or Foundation courses that satisfy group requirements in the Humanities, Science & Mathematics, and Social Science groups.
- 111 199 and 211 299 Other courses offered at first year and second year level. Normally, 100-199 number denote Freshman courses, and 200-299 indicate Sophomore courses.

DIVISION OF LIBERAL ARTS AND SCIENCES

LIST OF COLLEGE TRANSFER COURSES

SCIE	NCE A	ND MA	THEMAT	rics	
Mth	100			Intermediate Algebra	4 hours
Mth	101			College Algebra	4 hours
Mth	102			Trigonometry	4 hours
Ch	204,	205,	206	General Chemistry	5 hours each
GS	101,	102,	103	General Biology	4 hours each
GS	104,	105,	106	Physical Science	4 hours each
SOCIA	AL SCI	ENCE			
Ec	201,	202,	203	Principles of Economics	3 hours each
Hst	101,	102,	103	History of Western Civilization	3 hours each
Hst	201,	202,	203	History of the United States	3 hours each
Psy	201,	202,	203	General Psychology	3 hours each
HUMA	NITIES	S			
Wr	111,	112,	113	English Composition	3 hours each
Eng	101,	102,	103	Survey of English Literature	3 hours each
Sp	111,	112,	113	Fundamentals of Speech	3 hours each
BUSIN	ESS				
BA	101			Introduction to Business	4 hours
BA	211,	212,	213	Principles of Accounting	3 hours each
PHVS	ICAT T	EDUC <i>i</i>		- imerpres of necounting	5 nours each
PE	180	SDOCE	ATION	D	
				Physical Education (Women)	1 hour each term six terms
PE	190			Physical Education (Men)	1 hour each term
HE	250			Personal Health	six terms 2 hours
MUSIC	2				
Mus	201,	202,	203	Introduction to Music and Its Literature	3 hours each
ART					
AA	201,	202,	203	Survey of Visual Art	3 hours each

COURSE DESCRIPTIONS SCIENCE AND MATHEMATICS

Mth 100 Intermediate Algebra 4 hours

Functions and graphs, linear equations in two unknowns, quadratic equations, negative and fractional exponents, radicals, progressions, binomial theorem, logarithmic computation.

Pre-requisite: One year of high school algebra or Mth 10. No credit allowed if taken after Mth 101 or any more advanced mathematics course.

- Mth 101 College Algebra 4 hours
 Review of high school algebra emphasizing number system, logarithms, progressions, binomial series, theory of equations, determinants.
 - Pre-requisite: One and one-half years of high school algebra or Mth 100.
- Mth 102 Trigonometry 4 hours

 Trigonometric functions for general angles, solutions of triangles, addition formulas, trigonometric equations, graphs, complex numbers, and De Moivre's theorem.

Pre-requisite: Mth 101.

- Ch 204, 205, 206 General Chemistry 5 hours per term

 Professional course for students majoring in science, health sciences, and engineering. Three lectures and two three hour laboratory periods.
- GS 101, 102, 103 General Biology 4 hours each term
 Biological principles applied to both plants and animals. 3 lectures, 1 three-hour laboratory period.
- GS 104, 105, 106 Physical Science 4 hours each term Fundamentals principles of physics, chemistry, astronomy, and geology; development and application of the scientific method. 3 lectures, 1 two-hour laboratory period.

SOCIAL SCIENCE

- Ec 201, 202, 203 Principles of Ecomocics 3 hours per term

 Principles that underlie production, exchange, distribution, etc., must be taken in sequence.

 Pre-requisite: Sophomore standing.
- Hst 101, 102, 103 History of Western Civilization 3 hours each term Origins and development of Western Civilization from ancient times to the present.
- Hst 201, 202, 203 History of the United States 3 hours per term History of the U. S. from colonial times to the present.
- Psy 201, 202, 203 General Psychology 3 hours per term
 Introductory study of behavior and conscious processes. Survey of experimental studies of motivation, learning, thinking, perceiving, and individual differences.

HUMANITIES

Wr 111, 112, 113 English Composition

3 hours each term

The fundamental of English composition including frequent written themes. Special attention to correctness in fundamentals and to the organization of papers.

Eng 101, 102, 103 Survey of English Literature 3 hours each term Study of the principal works of English Literature based on reading selected to represent great writers, literary form, and significant currents of thought. Provides both an introduction to literature and a background that will be useful in the study of other literature and other fields of cultural history.

Fall term: Anglo; Saxon beginning to the Renaissance

Winter: Milton to Wordsworth Spring: Byron to the present time.

Sp 111, 112, 113 Fundamentals of Speech 3 hours per term Projects in extempore speaking. Primary emphasis on content and organization, with attention also to the student's adjustment to the speaking situation, effective delivery, audience motivation, and the language of speech.

BUSINESS ADMINISTRATION

BA101 Introduction to Business

4 hours

Business organization, operation, and management intended to orient the student in the field of business and to help him determine his field of major

BA211, 212, 213 Principles of Accounting 3 hours each term Introduction to the field of accounting, technique of account construction, preparation of financial statements; application of accounting principles to business problems; proprietorship studies from standpoint of single owner, partnership, and corporation.

PHYSICAL EDUCATION

PE 180 Physical Education (Women)

1 hour each term

A variety of activities taught for physiological and recreational values. Special sections for restricted and corrective work. A total of five terms required for all lower-division women students. (3 hours a week)

PE190 Physical Education (Men) 1 hour each term A vareity of activities taught for physiological and recreational values.

Special sections for restricted and corrective work. A total of five terms required for all lower-division men students. (3 hours a week)

Personal Health HE 250

2 hours

Study of the personal health problems of college men and women, with emphasis on implications for family life. Mental health, communicable diseases; degenerative diseases; nutrition. Satisfies the college requirement in health education for women.

FINE ARTS

201, 202, 203 Introduction to Music and Its Literature Mus

3 hours each term

Cultivation of understanding and intelligent enjoyment of music through a study of its elements, forms, and historical styles.

201, 202, 203 Survey of Visual Arts AA

3 hours per term

Cultivation of understanding and intelligent enjoyment of the visual arts through a study of historical and contemporary works; consideration of motives, media, and forms.

CURRICULA

Many different curricula are organized at Umpqua College to care for the varying needs of its students. The outlines that follows are suggestions of how a student might arrange his program in Liberal Arts and Sciences as well as specific departmental programs in Business Administration and Pre-Engineering.

LOWER-DIVISION LIBERAL ARTS AND SCIENCES

The Liberal Arts and Sciences enfold the ancient and continuing efforts of manto extend the range of his experience beyond the narrow limits of a single lifetime. Students can explore several fields to find their special interests and at the same time complete their Freshman and Sophomore requirements for a degree.

FRESHMAN YEAR

		Term Hours
English Composition (Wr 111, 112, 113) Physical Education (PE 180 or 190) Personal Health (HE 250) Social Science, Sequence Mathematic and Science, Sequence Electives		9 2 2 9 12 12-17
	Total	48
SOPHOMORE YEAR	3.	
Physical Education Science and Mathematic, Sequence continued Social Science, Sequence continued Electives		3 12 9 21-27
	Total	48

NOTE: A student can not transfer more than 93 term hours to another institution of higher learning in the State of Oregon which is part of the State System.

DEPARTMENTAL PROGRAM - BUSINESS ADMINISTRATION

The program outlined, if successfully completed, will permit a student to transfer into any of the major programs in business administration offered by the institutions of the Oregon State System of Higher Education at the junior level. Students may complete requirements for the baccaulaureate degree with two additional years of work at the four year institution.

FRESHMAN YEAR

BA 101 Introduction to Business	\mathbf{F}	W	S
Mth 100 Intermediate Algebra Mth 101 College Algebra	4		4
Wr 111, 112, 113 English Composition	3	$\frac{4}{3}$	3
Hst 101, 102, 103 History of Western Civili: Science Sequence (GS 104, 105, 106 or	zation 3	3	3
Physical Education	4 1- 2	4 1-2	4 1-2
Total	15-16	15-16	15-16

SOPHOMORE YEAR

Ec 201, 202, 203 Principles of Economics	F	W	S 3 3 3 3 1
BA 211, 212, 213 Principles of Accounting	3	3	
Sp 111, 112, 113 Fundamentals of Speech	3	3	
Psy 201, 202, 203 General Psychology	3	3	
Literature Sequence (Eng 101, 102, 103)	3	3	
Physical Education	1	1	
Total	16	16	16

DEPARTMENTAL PROGRAM - PRE-ENGINEERING

The program outlined below is recommended for college transfer students who plan to transfer to a professional school of engineering to complete a degree program.

Mth	100	Intermed	liate Algebra	F 4	W	S
Mth Mth	101 102		Algebra	1	4	4
Ch Wr Hst	111, 101,	205, 206 112, 113 102, 103	General Chemistry English Composition History of Western Civili	5 3 zation 3	5 3 3	5 3 3
Phys	sical E	ducation	Total	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$

OTHER DEPARTMENTAL PROGRAMS

The preceding professional schools in business administration and pre-engineering are examples of a number of fields a student may take in the first or second year of his lower division college education.

There are a number of other fields that could be listed such as teacher education, both elementary and secondary; pre-dentistry, pre-veterinary, etc. Should a student need help in planning his program at Umpqua College so that the courses taken here would meet the degree requirements of the transfer institution, the administrative and instructional staff will be very glad to arrange an interview in order to give the necessary counseling help.

DIVISION OF VOCATIONAL-TECHNICAL EDUCATION

AUTO MECHANICS CURRICULUM

The automotive courses offer broad basic instruction and shop practice in the fundamentals of automotive service. Components of the automobile are used for demonstration and practice. Emphasis is placed on diagnosis and correction of mechanical trouble. The aim of the course is to provide the knowledge and skill needed for immediate employment.

The college administration is attempting to develop a complete two year sequence of courses that will qualify the successful student for the associate degree. The present offerings will be subject to revision until full day time facilities are available.

FIRST TERM

Hours/			Course	Terr Units	m Hours
Class	Lab	Course Title	Nos.	Ullits	Hours
2	4	Automotive Chassis I Automotive Chassis Lab. I	3.300 3.301	2 2 2	24 48
2	4	Internal Combustion Engines I Internal Combustion Engines Lab I	3.304 3.305	2 2	24 48
1 2	4 2 2	Welding I Practical Physics I	4.153	2 3	36 48
4	2	Tractical Thysics 1			
		SECOND TERM			
2	4	Automotive Chassis II Automotive Chassis Lab II	3.302 3.303	$\frac{2}{2}$	24 48
2	4	Internal Combustion Engines II Internal Combustion Engines Lab II	3.306 3.307	2 2	24 48
$\frac{3}{2}$	2	Mathematics II Practical Physics II	$\frac{4.202}{4.302}$	3	36 48
		THIRD TERM			
2	4	Fuel Systems and Carburetion I Fuel Systems and Carburetion Lab I	3.310 3.311	2 2 2 1 3 2	24 48
2		Automotive Electricity I Automotive Electricity Lab I	$3.308 \\ 3.309$	2 1	24 24
2 2	2 2	Practical Physics III Power Trains	4.304 3.316	3 2	48 24
4	4	Power Trains Lab.	3.317	2	48

COURSE DESCRIPTIONS

- 3.300 AUTOMOTIVE CHASSIS I
 This course is designed to give students an understanding of the principles of operation of automotive chassis components. Fundamentals of front suspension and steering geometry, diagnosis of steering and suspension troubles, and overhaul techniques of steering and suspension systems are studied.
- 3.301 AUTOMOTIVE CHASSIS LAB. I
 A course to develop the ability to use basic hand tools, measuring tools, and shop equipment in the process of overhauling and adjusting various types of suspension and steering systems. It is the practical application of the theory studied in Automotive Chassis I 3.300.

- 3.302 AUTOMOTIVE CHASSIS II
 The purpose of this course is to familiarize students with the functions and principles of operation used on all major types of automotive brake systems. The student should acquire knowledge of brake trouble shooting, procedures for overhauling both conventional and power brakes, and service techniques.
- 3.303 AUTOMOTIVE CHASSIS LAB. II
 This is the practical application of the theory studies in Automotive Chassis II 3.302.
- 3.304 INTERNAL COMBUSTION ENGINES I
 This course is designed to give the student an understanding of the principles of operation of various types of internal combustion engines. Students should acquire a knowledge of the construction and operation of the automotive engine, all components, and accessories.
- 3.305 INTERNAL COMBUSTION ENGINES LAB. I
 This is the practical application of Internal Combustion Engines I, consisting of basic service and overhaul techniques commonly used on automotive engines.
- 3.306 INTERNAL COMBUSTION ENGINES II
 This course is intended to provide the student with knowledge of overhaul methods, trouble shooting, general engine performance and testing, and service techniques covering valve, cylinder, and bearing system.
- 3.307 INTERNAL COMBUSTION ENGINES LAB. II
 A shop course designed to provide experience in practical engine reconditioning. Diagnosis of troubles directly related to the engines and its performance is practiced with the use of test instruments. A companion course for Internal Combustion Engines II 3.306.
- 3.308 AUTOMOTIVE ELECTRICITY I
 This course is designed to provide the student with an understanding of the fundamental principles of electricity as used by the auto mechanic. Construction and function of automotive electrical components, including storage batteries, switches, ignition, and cranking systems are studied in detail with the aid of demonstrations, cutaway, and mock-up equipment.
- 3.309 AUTOMOTIVE ELECTRICITY LAB. I
 This is the practical application of the theory studied in Automotive Electricity I 3.308.
- 3.310 FUEL SYSTEMS AND CARBURETION I
 A course designed to give the students an understanding of the fundamental principles of carburetion, an overview of principles of engine fuel systems and fuels, operation and function of all types of fuel systems, and an understanding of the simple automotive carburetor. The student should acquire a basic knowledge of carburetor circuits.
- 3.311 FUEL SYSTEMS AND CARBURETION LAB. I
 This course is designed to enable the student to develop skill and understanding in overhaul of all types of simple automotive fuel systems and carburetors, analyzing the function of each component and circuit. Diesel and LPG fuel systems are disassembled by the student for study of construction and function of components and reassembled. A companion course for Fuel Systems and Carburetion I 3.310.

- 3.316 POWER TRAINS
 This is a course covering all components of the power train, including clutch, standard and overdrive type transmissions, drive line, and final drive. These components will be studied in detail in the classroom, using lecture and visual aids, to determine the function and operation of each units to form a basis for subsequent overhaul procedures.
- 3.317 POWER TRAINS LAB.
 This course is designed for building skill and utilizing practical work covering overhaul and trouble shooting all units of the automotive power train. All work is performed on laboratory units in conjunction with concurrent attendence in the Power Trains course.
- 4.202 MATHEMATICS II
 This is a course in practical mathematics for skilled workers, including the fundamentals of applied algebra and applied geometry, including symbols, equations, ratio and proportion, exponents, radicals, formulas, geometric lines and shapes, common geometric constructions, and introductory applied trigonometry.
- 4.153 WELDING I
 Setup and operation of oxy-acetylene and electric arc welding equipment.
 Demonstrations and practice in welding, brazing, and soldering ferrous and non-ferrous metals and their alloys. Various types of welds are made and tested. Technical information is correlated with actual practice to provide the student with an understanding of the composition of the various metals and methods of fabrication used in construction, maintenance, and repair industries.
- 4.300 PRACTICAL PHYSICS I
 This is an introductory course in practical physics covering matter, measurements, mechanics, and machines. Laboratory time is provided for demonstrations and experiments to help clarify the principles and procedures covered in class.
- 4.302 PRACTICAL PHYSICS II
 This is an introductory course in practical physics covering heat, light, and sound. Laboratory time is provided for demonstrations and experiments to help clarify the principles and procedures covered in class.
- 4.304 PRACTICAL PHYSICS III

 This is an introductory course in practical physics covering magnetism and electricity. Laboratory time is provided for demonstrations and experiments to help clarify the principles and procedures covered in class.

FORESTRY AIDE CURRICULUM

This is a post-high school course offered in cooperation with the U.S. Forest Service.

The courses in the curriculum are designed to meet the needs of persons preparing for employment for semi-professional work in the forestry field, and to provide for those persons already engaged in this occupation the opportunity to obtain further training that will help them advance in their employment.

Courses include training in such areas as forestry, graphics, surveying technical engineering and science as well as general education.

Anyone interested in the program should contact his employer, the State Department of Employment, or the College Administration Office.

This program will be revised and expanded to include material for a two-year study program.

FIRST TERM

Class Hours	Lab	Course Description	Course Number	Term Credit	Hours
2 3 3 3 3 3	4	Drafting I General Forestry Mathematics II Tree Identification Silviculture Practices I Communication Skills	4.101 8.100 4.202 8.102 8.104 1.100	4 3 3 3 3 3	72 36 36 36 36 36
		SECOND TER	MS		
3 1 3 2	4 4 4	Forestry Machinery Plane Surveying Silviculture Practices II Drafting II	3.356 6.101 8.106 4.104	4 3 3 4	84 60 36 72
		THIRD TER	M		
1 3 3 1	4 4	Plane Surveying Power Tools and Pumps Fire Control Forest Protection Cruising Methods	6.103 3.353 8.110 8.112 3.902	3 2 3 3 3	60 48 36 36 60

COURSE DESCRIPTION

1.100 COMMUNICATION SKILLS

This course is designed to improve the student's speaking and writing skills to help him grow in language power through the development of correct habits of careful, forceful expression. The course material covering the four basic skills - reading, speaking, writing, and listening, has been correlated so that the methods used in these four areas are complementary parts of the communications process.

3.353 POWER TOOLS AND PUMPS
A practical course in the actual operation and safe use of power equipment

A practical course in the actual operation and safe use of power equipment such as chain saws, brush cutters, power sprayers, automobiles, trucks, two-wheeled motor vehicles and fire pumps as well as sharpening and use of edged hand tools such as axes, brush hooks, and machetes.

3.356 FOREST MACHINERY

Trainees will be expected to be familiar with industrial safety principles, to be able to administer first aid in common emergencies, to use an axe, brush hooks, and machete safely; operate, care for, and make minor repairs on chain saws and pumps, and to operate and make minor repairs on automotive equipment. Trainees will be expected to perform minor maintenance on all equipment.

3.902 CRUISING METHODS

A course in methods of cruising standing timber, including strip, fixed plot and variable plot techniques. Practical work will be accomplished in running primary control and secondary control with staff compass, box compass and ranger type compass. Systems of gathering and recording incidental information included in course as well as office records and data processing cards.

4.101 DRAFTING I

See previous description under General Construction Curriculum.

4.104 DRAFTING II

This is an intermediate course designed to prepare students to enter mechanical, structural, civil, and architectural drafting. It includes isometric projection, perspective drawing. Emphasis is placed on the concept, technique of inking, and the development of working drawings as used in industry.

- 4.105 DRAFTING II LAB
- 4.202 MATHEMATICS II See previous description.
- 6.101 PLANE SURVEYING

A beginning course in surveying techniques designed to give the student an understanding of the fundamentals of chaining and leveling, care and adjustment of surveying instruments, and office procedures. Provision is made by appropriate field work for practical application of the techniques learned.

6.103 PLANE SURVEYING

A continuation of Plane Surveying 6.101 designed to familiarize the student completely with the engineer's transit. Uses of the transit are considered, and practical problems put the theory into practice.

8.100 GENERAL FORESTRY

This course is an introduction to forestry in the United States, presenting an overview of the general field of forestry together with some specific information on the broad areas of history of forestry, forest protection, harvesting timber crops, forest products and management of the forest resource as pertains to forest technology.

8.102 TREE IDENTIFICATION

The purpose of this course is to provide sufficient knowledge of the botanical and other physical charactristics of trees and shrubs to make possible identification of the ones a technician in this area should know in conducting his work. Specific identification of Douglas Fir, true firs, hemlocks, spruces, pines and "cedars" as well as some broad leaf trees as, for example, alders, maples, oaks, and various other minor species are included.

8.104 SILVICULTURE PRACTICES I
A course in the place of silviculture as

A course in the place of silviculture as it covers the realm of activity of the forestry aide or technician, particularly as regards thinning, pruning, salvage cuttings, release cuttings, basal spraying, planting and seeding. Content centered in application of techniques.

8.106 SILVICULTURE PRACTICES II

A presentation of silviculture systems, clear-cutting, seed tree method, shelterwood methods, selection method and vegetative methods of reproduction. Course content presented at technicians or aides level designed to enhance the value of the aide or technician to the professional forester as a suitable complement in executing many of the management functions based upon silviculture considerations of a higher order.

8.110 FIRE CONTROL

This is a basic course in fire behavior, weather, effect of topography, fuels large fires, fire danger ratings, techniques of fire control in common use, tools used, record keeping, communication, organizations for fire fighting and public relations for fire prevention.

8.112 FOREST PROTECTION

A study of the agencies other than direct fire damage which work to the detriment of optimum development of the forest. Areas of instruction include damage from the forces of nature, forest disease, forest insects, and animal damage. Specific study covers identification of many of the organisms causing damage to the forest.

GENERAL CONSTRUCTION CURRICULUM

This course is designed to give the student basic knowledge in construction that would be useful to him regardless of the occupational choice made later in life. It is intended to stimulate the student to think about choosing an occupation directly or indirectly related to the field. Construction employment opportunities, particularly in woodworking crafts, are better than ever before.

General purpose and manner of presentation would include:

- 1. Program designed so student may get a job.
- 2. To directly reflect the areas of employment.
- 3. The equipment to be standard tools used in industry.
- 4. Students selected from graduates and dropouts.
- 5. Students will do experiments and models rather than projects.
- 6. Continual evaluation of course content and student progress.

The instructional areas would be based on the quarter (12 weeks) basis. Meetings of the class would involve 20 hours of class or laboratory time with an additional 4 hours of home study per week. There will be few take home projects.

This course is subject to revision due to needs of the student and interest of community.

	FIRST TERM		
Hours/Week Class Lab	Course	Number	Credits
2 2 2 4 2 2 4 3 4	Materials of Construction Drafting Industrial Safety Tool Care and Maintenance Mathematics Coop. Work Experience	6.108 4.101 4.108 4.160 4.202 4.164	2 4 2 2 2 2
2 2 4 2 4 2 2 2 4	SECOND TERM Concrete and Masonry Building Structures Millwork and Casework Practical Electrical Wiring Welding Coop. Work Experience	4.130 4.132 4.136 4.140 4.153 4.164	2 4 4 2 2
2 2 2 2 2 2 4 2	THIRD TERM Construction Standards Construction Costs Computation Painting and Decorating Finish Carpentry (Interior and Exterior) Blue Print Reading Coop. Work Experience	4.110 4.134 4.142 4.138 4.106 4.164	2 3 3 4 2 6

COURSE DESCRIPTION

- 4.101 DRAFTING
 This is a fundamental course in drafting designed to give the student a basic understanding of drawing techniques. Emphasis will be placed on the application of drafting instruments, standard orthographic projection, layout procedures and ASS approved lettering techniques. Drawing techniques such as geometric construction, selection of views, sectional and auxiliary views, revolutions, threads, and standard dimensioning practices will be covered.
- 4.102 LAB FOR THE ABOVE CLASS.
- 4.106 BLUE PRINT READING
 This course is designed to teach the student to understand the symbols and and methods of diagraming ideas as they are produced on blueprints for use in the factory or in the field. Simple sketching is also taught so that the student will be able to express his ideas in graphic form.
- 4.108 INDUSTRIAL SAFETY
 A survey of the principles of safety for industry. Includes safety codes, personnal considerations, and safety practices relating to design work, material handling and equipment.
- 4.110 CONSTRUCTION STANDARDS
 Study of building code regulations and required construction practices covered in local, state, and federal standards.
- 4.130 CONCRETE AND MASONRY
 This course is a study in detail of the qualities of concrete work. Critical analysis of strength and weakness pertaining to slab work, foundations, footing and masonry construction.
- 4.132 BUILDING STRUCTURES (Framing)
 This is a study of the type of framing used for home, industrial and commercial building. Framing methods, prefabrication of component parts, module construction.
- 4.133 LAB FOR THE ABOVE CLASS.
- 4.134 CONSTRUCTION COST COMPUTATIONS
 Introduction to the basic principles of estimating the amount and cost of materials required, and the attendant labor cost involved in various types of construction projects.
- 4.135 LAB FOR THE ABOVE CLASS.
- 4.136 MILLWORK AND CASEWORK
 A study of construction methods used in making furniture, built in cabinets, case construction, drawer making, furniture assembly.
- 4.137 LAB FOR THE ABOVE CLASS.
- 4.138 FINISH CARPENTRY (Interior and Exterior)
 This course is designed to acquaint the student with the fundamentals for finish carpentry, such as siding materials, windows, doors, interior walls, insulation, floors, trim.
- 4.139 LAB FOR THE ABOVE CLASS.

- 4.140 PRACTICAL ELECTRICAL WIRING
 This course covers the basic fundamentals of electricity, circuits, heating, electric motors. An overview will be made of the problems of installing electricity in the home, or commercial buildings.
- 4.142 PAINTING AND DECORATING
 This course is a study of the many materials available that are used to
 finish todays industrial output. Varnishes, lacquers, paints, sealers, opaque coverings. Test samples will be made up to give experience in application. Some study of the abrasives used to prepare the surface will be
 covered.
- 4.143 LAB FOR THE ABOVE CLASS.
- 4.160 TOOL CARE AND MAINTENANCE
 Study of the design, use, selection and care of the craftsman tools. Layout, sawing, drilling, and cutting tools will be used and maintained. Included will be power tool care, sharpening and grinding procedures.
- 4.161 LAB FOR THE ABOVE CLASS.
- 6.108 MATERIALS OF CONSTRUCTION
 Comparisons of various materials, their source, methods of manufacture, physical and chemical properties; grading under a variety of conditions; soil and terrain as encountered in construction work.
- 4.202 MATHEMATICS II

 This is a course in practical mathematics for skilled workers, including the fundamentals of applied algebra and applied geometry, including symbols, equations, ratio and proportion, exponents, radicals, formulas, goemetric lines and shapes, common geometric constructions, and introductory applied trigonometry.
- 4.153 WELDING I
 Setup and operation of oxy-acetylene and electric arc welding equipment.
 Demonstrations and practice in welding, brazing, and soldering ferrous and non-ferrous metals and their alloys. Various types of welds are made and tested. Technical information is correlated with actual practice to provide the student with an understanding of the composition of the various metals and methods of fabrication used in construction, maintenance, and repair industries.
- 4.164 COOPERATIVE WORK EXPERIENCE
 A work experience program in business establishments. Approval by the appropriate school official.

STENOGRAPHIC CURRICULUM

FIRST TERM

Hours/Week		Course	Teri	m
Class Lab.	Course Title	Numbers	Units *Hours	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Business English I Office Machines I Office Procedures I Typing I Shorthand I	1.120 2.519 2.512 2.501 2.541	3 3 3 4 16	36 48 72 72 72 72 300
	SECOND TERM	л		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Business English II Office Machines II Office Procedures II Typing II Shorthand II	1.122 2.521 2.514 2.503 2.543	3 3 3 4 16	36 48 72 72 72 72 300
	THIRD TERM			
3 0 2 2 2 4 2 4 2 4 11 14	Business English III Office Machines III Office Procedures III Typing III Shorthand III	1.124 2.523 2.516 2.505 2.545	3 3 3 3 4	36 48 72 72 72
14	To	tals	16	300

^{*}Computed on 12 weeks.

COURSE DESCRIPTION

1.120 BUSINESS ENGLISH I

Business English I is aimed at building the student's vocabulary, spelling ability, usage of words, and provides a thorough review of the principles of grammer while applying them in sentences. Written and oral communications as required in business situations are emphasized.

1.122 BUSINESS ENGLISH II

Intended to follow Business English I and will include continuation of the review of grammer, study of vocabulary building, spelling, punctuation, and penmanship. Writing of business letters will be introduced. Speech and the informal personal communications studied. Practical application in the writing of business letters will be stressed.

1.124 BUSINESS ENGLISH III

Grammar, punctuation, spelling, penmanship, and personal communication will receive specialized coverage. Emphasis will be given to special types of business letters, forms, wire communications, and reports.

2.519 OFFICE MACHINES I

Combines basic mathematics with instruction in the applications of office machines to bookkeeping and other office problems. The general functions of the office machines and understanding their application in business and the acquiring of reasonable skills in their use is a major goal.

2.521 OFFICE MACHINES II

A continuation of Office Machines I with attention given to basic mathematics and the use of machines in solving bookkeeping problems. Cutting stencils, duplicating masters, letter guides, etc.

2.523 OFFICE MACHINES III

Emphasizes mathematical machines found in larger offices such as the full-key board adding-listing machine and the key-driven calculator.

2.512 OFFICE PROCEDURES I

Designed to introduce the student to general office duties and the simple tools he will use in an office. Detailed instruction in filing is given.

2.514 OFFICE PROCEDURES II

A continuation of Office Procedures I and prepares the student to handle office mail, telephone and telegraph communications, sources of information, and prepare office records and reports, including graphic presentations of business trends. Reports and records are emphasized.

2.516 OFFICE PROCEDURES III

A continuation of Office Procedures II with emphasis on those office duties that require meeting the public as receptionist, cashiering, preparing credit instruments, and sales office operations. The student will be briefly introduced to economic factors that affect business in this course. Public relations and personality receive emphasis.

2.541 SHORTHAND I

Beginning course in Gregg Simplified Shorthand. Study of simplified principles which should enable the student to take simple dictation and transcribe it in the early part of the course; and while rhythm and good penmanship in forming shorthand characters are stressed more than speed, the student should progress to a speed of about 40 words per minute in the first term.

2.543 SHORTHAND II

Continuation of Shorthand I. It deals principally with special and abbreviated forms, punctuation, and compound words, in conjunction with writing and transcribing exercises, to build the student's speed to 60 words per minutes writing and 20 words per minute typing.

2.545 SHORTHAND III

For the student who has learned the principles of shorthand covered in Shorthand I and II. It includes advanced vocabulary, phrase building, and word building principles. Practice included should develop the student's speed to 100 words per minute from unfamiliar dictation and 30 words per minute transcription.

2.501 TYPING I

Beginning course in typing for those with no previous typing instruction. It covers the parts and construction of the more common makes of type-writers, learning of the keyboard, and the basic techniques of the touch system. The student should develop rhythm in his movements and attain a typing speed of approximately 25 words per minute.

2.503 TYPING II

A continuation of Typing I with emphasis on increasing the typing speed to $40 \ \mathrm{words}$ per minute while mastering the various forms of business communications.

2.505

TYPING III
An intermediate course including corrective and acceleration drills to develop a minimum typing speed of 50 words per minute. The student receives instruction in cutting stencils and masters for various duplicating processes and additional training in the various business papers encountered in a general office. general office.

DIVISION OF GENERAL ADULT EDUCATION

TECHNICAL-VOCATIONAL and GENERAL EDUCATION

The purpose of this program is to provide lifelong learning opportunities for those persons who wish to improve themselves on the job, perpare for new work, or simply learn an avocation for recreational purposes. The courses in this division will be scheduled in the evening unless otherwise indicated. The convenience of the students is the determining factor. Persons interested in any particular course should make their wants known to the college administration. Term schedules of classes are available in September, December, March and May (Summer Session).

Every effort will be made to present any course of study for which there is an expressed need and interest anywhere in the Umpqua College District. A minimum enrollment of 12 is required for operating a class.

APPRENTICESHIP

Related technical information classes are offered to those registered as apprentices with the Oregon State Apprenticeship Council. They are not open to others. Classes are available for Apprenticed Carpenters, Inside Wiremen, Plumbers, Maintenance Electricians, Sheetmetal Workers, Power Lineman and others.

OCCUPATIONAL EXTENSION TRAINING

Courses provided in occupational extension are for those persons who are experience-ed workmen and wish to increase their performance skills, technical knowledge and related industrial information that will enable them to advance in their present occupation or to attain a promotion. Courses are numbered in the series of 9.050 to 9.240 and 9.400 to 9.649.

BUSINESS AND DISTRIBUTIVE EDUCATION

The business program is designed to further train men and women of all ages for their initial jobs and for in-service training to improve present business skills. Courses in this area are numbered in the series of 9.250 to 9.299 and 9.700 to 9.749.

HOME ECONOMICS EDUCATION

Evening classes are available to aid the homemaker in improving conditions in the home. There are no special requirements for admission other than interest and ability to do the work. Specific courses are listed in the group from 9.900 to 9.949.

ADULT GENERAL EDUCATION COURSES

Various courses are offered such as foreign languages for conversational purposes, woodworking, etc. See the course listings between 0.100 to 0.999.

COURSE DESCRIPTION

- 9.100 Blue Print Reading for Maintenance Personnel
 Covers reading of plans for repair and maintenance purposes, locations of
 electrical, plumbing, heating, service installations, etc.
- 9.105 Blue Print Reading for Building Trades
 Covers basic terminology, types of plans, symbols used, scale presentations, specifications, and practice problems in reading.

PROPOSED SCHEDULE FOR AUTO MECHANICS

Fall Term:

Chassis

Internal Combustion Engines

Winter Term:

Brakes

Carburetion

Spring Term:

Electrical Tune-Up

9.110 Auto Mechanics - Chassis

The principles of operation of chassis components. Fundamentals of front suspension and steering, diagnosis and overhaul of steering and suspension systems.

9.111 Auto Mechanics - Brake Systems

The student should acquire knowledge of brake trouble shooting, procedures for overhauling both conventional and power brakes, and service techniques.

9.112 Auto Mechanics - Internal Combustion Engines

This course is designed to give the student an understanding of the principles and operation of the various types of internal combustion engines, including a knowledge of the construction and operation of the automotive engine, all components, and accessories.

9.113 Auto Mechanics - Carburetion and Fuel Systems

Designed to give the student an understanding of the fundamental principles of carburetion, an overview of principles of engine fuel systems, and fuels, operation and function of all types of fuel systems, and an understanding of the simple automotive carburetor. Prerequisite: 9.112.

9.114 Auto Mechanics - Electrical Systems

To provide an understanding of the fundamental principles of electricity as used by the auto mechanic. Construction and function of automotive electical components, including storage batteries, switches, ignition, and cranking systems.

9.115 Auto Mechanics - Tune Up and Diagnosis

Designed to enable one to recognize and diagnose malfunctions in the automotive engine and its accessory systems. Use of advanced methods of testing electrical and carburetion systems. Prerequisits: Advanced standing and/or experience.

9.120 Drafting

This is a fundamental course in drafting designed to give the student a basic understanding of drawing techniques. Emphasis will be placed on the application of drafting instruments, standard orthographic projection, layout procedures, and ASA approved lettering techniques. Drawing techniques such as geometric construction, selection of views, sectional and auxiliary views, revolutions, threads, and standard dimensioning practices will be covered. Prerequisite: Approval by Vocational-Technical Director.

9.121 Drafting

This is an intermediate course designed to prepare students to enter mechanical, structural, civil, and architectural drafting. It includes isometric projection, prespective drawings. Emphsais is placed on the concept, technique of inking, and the development of working drawings as used in industry. Limitations of general shop equipment are discussed. Prerequisite: Drafting 9.120 or equivalent.

9.130 Surveying

A beginning course in surveying techniques designed to give the student an understanding of the fundamentals of chaining, leveling and transit work, care and adjustment of surveying instruments, and office procedures. Provision is made by appropriate field work for practical application of the techniques learned.

9.131 Surveying

A fundamental course which is a continuation of Surveying 9.130. It is designed to familiarize students with stadit, topographic, planetable, and boundary surveys. Meridian determination and uses of aerial photogrammetry are considered.

- 9.150 Welding (Beginning) See 9.151 for description.
- 9.151 Welding (Advanced)
 Setup and operation of oxy-acetylene and electric arc welding equipment.
 Demonstrations and practice in welding, brazing, and soldering ferrous and non-ferrous metals and their alloys. Various types of welds are made and tested. Technical information is correlated with actual practice to provide the student with an understanding of the composition of the various metals and methods of fabrication used in construction, maintenance, and repair industries. This is one course; two consecutive terms.
- 9.180 Carpenter Apprentice Related
- 9.181 Industrial Electrician Apprentice Related
- 9.182 Inside Wireman Apprentice Related
- 9.183 Power Lineman Apprentice Related
- 9.184 Plumber Apprentice Related
- 9.185 Sheetmetal Apprentice Related
- 9.250 Business Law

A review of the nature of law as necessary. Emphasis is on contractual relationships, the law of sales, bailments, and negotiable instruments.

9.260 Business Math

A rapid rebuilding of fundamentals is accomplished.

9.261 Business Math II

Interest, discount, negotiable instruments, and payroll mathematics are studied. Cash and trade discounts, depreciation taxes, etc.

9.400 Nurses' Aide

Studies, practice, and demonstration of the principles and methods used in the physical care of the sick.

9.700 Typing I

This is a beginning class in typing for those with no previous typing instruction. Covers the parts and construction of the more common makes of machines, keyboard, etc. Should develop rhythm in his movements and attain an acceptable typing speed.

9.701 Typing II

Continuation of Typing I with emphasis on increasing the typing speed to an acceptable level.

- 9.702 Typing III Corrective and acceleration drills, instruction in the various business papers encountered in the general office.
- 9.710 Accounting I
 An introduction to accounting and the fundamental principles of accounting as applied to a sole proprietorship; the meaning and purpose of accounting; accounting statement; balance sheet and profit and loss statement; the theory of debits and credits; accounts and the trial balance; journals, ledgers, payroll; the complete accounting cycle.
- 9.715 Accounting II
 Partnership, cash control, negotiable instruments, assest valuation, sales, taxes, adjusting and closing, use of worksheets. Prerequisite: Accounting I.
- 9.716 Accounting III Corporation formation, equity accounting, bonds and investments, manufacturing, product cost, analysis of financial statement. Prerequisite: Accounting II.
- 9.718 Cost Accounting
 The relation of cost accounting to management for control; general principles involved in constructing a cost system; distribution of cost-materials, labor and burden; cost record; operating reports; joint and by-product cost and budgetary control. Prerequisite: Accounting III or equivalent.
- 9.720 Payroll Accounting
 Federal and State old age, unemployment, and disability insurance laws;
 state and local sales taxes. Accounting records which involve the numerous regulations of governmental bodies. Prerequisite: Accounting I or equivalent.
- 9.730 Shorthand I
 An introduction to theory, reading and writing outlines of abbreviated words, phrasing and contexual material. Course includes dictation and longhand transcription of familiar previewed material.
- 9.731 Shorthand II
 A continuation of 9.730; completion of theory and introduction to dictation and longhand transcription of unfamiliar material. Aims at speed of 60 words per minute.
- 9.732 Shorthand III Continuation of 9.731 to develop shorthand skills, accuracy, and speed of 80 to 100 words per minute.
- 9.740 Office Machines I
 Aimed toward teaching the general function of the various machines so that the student will have an understanding of the application of these machines in business.
- 9.741 Office Machines II

 Teaches the principles and functional application of office machines used in the mathematical accounting field. A continuation of 9.740.
- 9.900 Basic Clothing Construction (Bishop I)
- 9.901 Basic Fitting and Shirtmaking (Bishop II)
- 9.902 Tailoring (Bishop III)

- 9.910 Knitting
 Beginners and more advanced knitters could receive individual help in the same class.
- 0.110 Woodworking Practices (Shop)
- 0.543 Water Color and Color Theory
- 0.545 Painting, Oil, etc.
- 0.600 Conversational Spanish
- 0.601 Conversational Spanish
- 0.602 Conversational Spanish
- 0.606 Conversational French
- 0.607 Conversational French
- 0.608 Conversational French
- 0.612 Conversational German
- 0.613 Conversational German
- 0.614 Conversational German

ADDITIONAL COURSES THAT MAY BE ADDED:

COURSE DESCRIPTION

9.126 Architectural Drawing

An advanced course emphasizing architectural drawing techniques. The course will cover methods and procedures in architectural drawings, lettering, layout and design of the standard drawings, and rendering the display drawing. Carpentry and masonry principles and construction drawings are included. Design principles such as standard stock sizes, strength of joints, maximum loads and spans, and material weights will be discussed. Application consists of preparing sets of working drawings of residential and commercial buildings.

9.250 Small Business Operation

In this course the student is introduced to the small business in the American economy and advised of recent trends and operations in small business operation. The problems of establishing and operating a business are considered, with emphasis given to the field of retailing.

9.252 Fundamentals of Salesmanship

An analysis and evaluation of the salesman of today and the role he plays in our economic life are made during this course. The principles and techniques of selling constitute the area covered in this course. Attention is given to both inside and outside selling activities.

GENERAL EXTENSION DIVISION

The General Extension Division courses are generally Junior, Senior, or Graduate classes offered in conjunction with the General Extension Division of the State System of Higher Education through the University of Oregon. Umpqua College will try to offer at least seven classes per term and the list of those classes will be available September 8 for the fall term. The classes will begin on September 28.

TENTATIVE FALL TERM SCHEDULE

1964

Monday Geol.	352	Geology of Oregon 3 Cr. Instructors - Peterson & Ramp	Begins September 28 7-9:45 P. M. Room 104
Tuesday AA	293	Elementary Sculpturing 2 Cr. Instructor - Jean Sutherlin	Begins September 29 2-5 P. M. Room to be arranged.
Wednesday HE	358	First Aid Instructor - Dan Bulkley	Begins September 30 7-9:45 P. M. Room HR 1
Thursday A	334	Painting 2 Cr. Instructor - Robert Alston	Begins October 1 7-9:45 P. M. Room LA 6
Ed	574	School Supervision 3 Cr. Instructor - Dr. Art Hearn	7-9:45 P. M. Room SA 8
Ed	410	Methods & Research - Elem. 3 Cr. Social Studies Instructor - Dr. John McCullom	7-9:45 P. M. Room SA 10

The courses listed are given by the General Extension Division and will be handled by Umpqua College as far as registration and room arrangements are concerned. The cost of these courses will be \$14.00 a credit hour. Minimun of \$28.00 is required. A three credit hour course will be \$42.00. If you take seven or more hours, the cost will be \$110.00. Payment for courses will be made directly to the General Extension Division. General Extension Classes will be held at Roseburg Senior High School unless otherwise designated.

If you wish to take courses in Umpqua College, separate financial arrangements will have to be made with the Registrar of Umpqua College.

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